

# INTERNATIONAL SEARCH REPORT

Int'l Application No  
PCT/GB2004/001295

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 F16C11/06

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 F16L F16C B60G B62D F16F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	EP 0 781 932 A (MINEBEA KK) 2 July 1997 (1997-07-02) column 2, line 42 -column 5, line 59; figures 4,10	1-8,13, 14 9
X	US 5 902 050 A (SOLOMON RANDALL L ET AL) 11 May 1999 (1999-05-11) column 2, line 11 -column 3, line 12; figure 2B	1,2,7,8, 13,14
X	US 3 243 239 A (HACKMAN KENNETH V) 29 March 1966 (1966-03-29) column 1, line 69 -column 2, line 67; figures 3,5	1,2,5-7, 13,14
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

\* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
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- \*P\* document published prior to the international filing date but later than the priority date claimed

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- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
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Date of the actual completion of the international search

17 June 2004

Date of mailing of the international search report

02/07/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Axelsson, T

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 033 722 A (LAMMERS BRYAN G) 23 July 1991 (1991-07-23) column 3, line 24 -column 4, line 51; figure 1 -----	1,2,8, 13,14

# INTERNATIONAL SEARCH REPORT

Information on patent family members

Inter national Application No  
PCT/GB2004/001295

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 0781932	A	02-07-1997	JP EP	9177778 A 0781932 A1
				11-07-1997 02-07-1997
US 5902050	A	11-05-1999	CA EP WO	2256419 A1 0901580 A1 9745650 A1
				04-12-1997 17-03-1999 04-12-1997
US 3243239	A	29-03-1966	NONE	
US 5033722	A	23-07-1991	CA	2020471 A1
				22-02-1991